

AMENDMENTS TO THE CLAIMS

1-23. (Canceled)

24. (Currently amended) A receiver circuit comprising:

- a) an antenna for receiving [[a]] an amplitude modulated carrier signal at a modulation frequency;
- b) a transistor connected to the antenna and configured to operate as a detector of modulation of the amplitude modulated carrier signal;
- c) a resonator circuit connected to the transistor and configured such that the transistor simultaneously self-oscillates at substantially the modulation frequency to produce an oscillation signal;
- d) an oscillator quenching means for periodically quenching oscillation of the transistor; and
- e) oscillating sensing means connected to the resonator circuit and arranged to receive the oscillation signal and for sensing characteristics of a build-up of oscillation to indicate a presence of the amplitude modulated carrier signal.

25. (Currently amended) The receiver circuit according to claim 24, in which the oscillator quenching means quenches the oscillation of the transistor when a magnitude of the oscillation signal reaches a selected magnitude, and in which the means for sensing measures a time between quenching of the transistor to indicate the presence of the amplitude modulated carrier signal.

26. (Previously presented) The receiver circuit according to claim 25, in which the selected magnitude is a point at which oscillator compression of the transistor occurs.

27. (Currently amended) The receiver circuit according to claim 24, in which the oscillator quenching means quenches the oscillation of the transistor at regular time intervals,

and in which the means for sensing measures a magnitude of the oscillation signal over at least one of the time intervals to indicate the presence of the amplitude modulated carrier signal.

28. (Previously presented) The receiver circuit according to claim 24, in which the transistor comprises a field effect transistor.

29. (Previously presented) The receiver circuit according to claim 28, in which the oscillator quenching means quenches the oscillation of the field effect transistor by varying a drain source current.

30. (Previously presented) The receiver circuit according to claim 24, in which the resonator circuit comprises a ceramic resonator.

31. (Previously presented) The receiver circuit according to claim 24, in which the resonator circuit comprises a quartz crystal.

32. (Previously presented) The receiver circuit according to claim 24, in which the resonator circuit comprises a network of at least one of a capacitor and an inductor.

33. (Previously presented) The receiver circuit according claim 24, and further comprising a matching network between the antenna and the transistor.

34. (Canceled)

35. (New) A receiver circuit comprising:

- a) an antenna for receiving a frequency modulated carrier signal;
- b) a narrowband filter for converting the frequency modulated carrier signal to an amplitude modulated signal at a modulation frequency;
- c) a transistor connected to the narrowband filter and configured to operate as a detector of modulation of the amplitude modulated signal;

d) a resonator circuit connected to the transistor and configured such that the transistor simultaneously self-oscillates at substantially the modulation frequency of the amplitude modulated signal to produce an oscillation signal;

e) an oscillator quenching means for periodically quenching oscillation of the transistor; and

f) oscillating sensing means connected to the resonator circuit and arranged to receive the oscillation signal and for sensing characteristics of a build-up of oscillation to indicate a presence of the modulated carrier signal.

36. (New) A receiver circuit comprising:

a) an antenna for receiving a phase modulated carrier signal;

b) a narrowband filter for converting the phase modulated carrier signal to an amplitude modulated signal at a modulation frequency;

c) a transistor connected to the narrowband filter and configured to operate as a detector of modulation of the amplitude modulated signal;

d) a resonator circuit connected to the transistor and configured such that the transistor simultaneously self-oscillates at substantially the modulation frequency of the amplitude modulated signal to produce an oscillation signal;

e) an oscillator quenching means for periodically quenching oscillation of the transistor; and

f) oscillating sensing means connected to the resonator circuit and arranged to receive the oscillation signal and for sensing characteristics of a build-up of oscillation to indicate a presence of the amplitude modulated carrier signal.